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ABSTRACT

Understanding why students drop out is important in developing effective dropout prevention strategies. Traditional research has focused on high school dropouts; recent interest uses a developmental approach and examines possibilities for earlier intervention. Each section of this report analyzes dropout prevention at the preschool, elementary, secondary, junior high, and high school levels. Identification of dropout characteristics, an analysis of problems unique to each level of schooling, and an overview and critique of selected programs are included in each chapter. Where relevant, problems specific to socioeconomic status, race, gender, and ethnicity are discussed. Appendices include additional information about model dropout programs and addresses of selected prevention programs. (98 references) (LMI)

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Dropping Out: A Preschool through High School Concern

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December 1987

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Executive Summary

Americans generally hold the belief that success comes through education. And in many fields, the years of schooling required for employment have risen dramatically. Despite this emphasis on education, however, thousands of students continue to drop out.

Understanding why students drop out is important in developing effective dropout prevention strategies. But by focusing on the specific act of dropping out and emphasizing associated consequences, educators have often neglected the search for earlier clues. As students progress through the grades, their experiences shape their thinking about school and may contribute to an orientation that promotes dropping out later. This paper examines dropout characteristics and behavior from preschool through high school and presents the experience of selected dropout prevention programs.

The following characteristics are known to be strongly associated with dropouts:

1. Low or failing grades and low standardized test scores
2. Placement in a remedial academic track
3. Bored or apathetic attitude toward school
4. Chronic truancy
5. Over age for a particular grade
6. In-school delinquency
7. Parents who did not complete high school
8. Family with serious economic problems
9. Family headed by a single parent (although the absence of natural parents in itself may be less important than associated financial problems)
10. Minority group status (ethnic, racial, linguistic, or cultural)
11. Social isolation from peers (less participation in academic and extracurricular activities)
12. Low academic self-esteem (perception of ability to succeed at academic tasks)
13. Low sense of personal autonomy (power to influence the environment and to effect desired outcomes)
14. Low educational and occupational aspirations
15. Teenage marriage or pregnancy

Traditionally, interest and research have focused on high school dropouts. More recently, researchers, educators, policy makers, and business and community leaders are recognizing a developmental aspect to dropout behavior and examining possibilities for earlier intervention.

Preschool

Preschools are viewed by some as opportunities to equalize children's knowledge and skills before entering a public school system. Results of these compensatory programs are often contradictory, although there are long-range studies which indicate that compensatory programs have had a positive effect upon children. These effects include cost-effective and relative improvements in educational achievement and later success, as measured by grade and degree attainment, employment, and earnings.

Other educators are concerned that compensatory programs are premised upon a deficit model, and as such, may generate lowered academic expectations among the children served. This is an important concern because researchers contend that the most powerful predictor of a student's completion of high school is his or her own expectation of eventual educational attainment. Parents' attitudes toward school, and their educational level, also affect dropout behavior in their children.

In view of this, programs that address children's early expectations of school success could be effectively initiated in preschool. Efforts could address ways in which parents' level of education and attitudes toward school affect their children's expectations of their own school success. Similarly, efforts should focus upon teachers' expectations of students' potential for achievement and how these expectations affect children in their classes. Preschool programs should be designed to increase the likelihood of positive learning experiences for children and to reinforce their value as individuals, capable of learning and succeeding in school.

Elementary

Elementary school is an important time to identify students' strengths and weaknesses and to provide critical educational intervention when necessary. Many dropout prevention programs, for example, focus exclusively on low-achieving students. Intellectually gifted students who are bored with the regular curriculum are often overlooked, yet without academic challenges appropriate to their level, these students may also be at risk of dropping out.

Every effort should be made to ensure that children progress steadily through the elementary grades and that they maintain an appropriate level of achievement in all essential skills, particularly reading. Fiscal and other resources, varied teaching strategies, on-going support, and follow-up are needed to accomodate individual student differences within classrooms. The practice of having students repeat grades needs to be examined closely in light of research which points out the correlation between grade retention and dropping out.

Research now underway suggests that the ways in which students are grouped can be modified so that all children develop a stronger sense of their academic abilities. There are also a few, yet important, dropout prevention programs which attempt to change teacher behavior and attitudes which may be biased against low-achieving children.

Teachers and administrators must be alert to conditions of children that may signal problems later on. A checklist of characteristics commonly associated with later dropout behavior, used only to flag the possible need for intervention strategies, can be helpful in alerting school personnel to potential at-risk children. Elementary school is also the place to assess the extent and strength of a child's supportive networks. These networks should include all resources available to support each child as he or she moves through school. This may involve strengthening existing networks and creating new ones as needed.

Secondary

Secondary students confront a more complex array of problems than they found in elementary school. Increasing maturity, peer group pressure, and the complexity and range of issues confronting students further complicate their relationships to school. This is particularly true in junior high.

There is growing recognition that many students begin "phasing out" in junior high, eventually dropping out even before reaching high school. Greater attention should be given to helping students make the transition from elementary to secondary schools where instruction, often large group instruction, is carried out in a departmentalized system by different teachers. Such efforts might help students feel more connected to their school environment.

If students feel incompetent intellectually, inadequate academically, and alienated from school, "escaping" from the system becomes an attractive option. There should be opportunities for students to move among academic tracks in order to choose courses that meet their abilities and interests. In addition, low-achieving students benefit from experiences that connect school with work as well as future educational opportunities. It is in this area that businesses can play a vital role in supporting the efforts of schools by providing students with an opportunity for part-time work, conditioned upon regular attendance and progress in school.

Teachers who work with students at risk of dropping out should be trained in alternative ways of instructing students who have a history of school failure. This may involve addresssing existing teacher, parent, and student attitudes. It may require structural changes within secondary institutions to increase student involvement or provide a more personalized learning environment. Other modifications might include alteration of

instructional strategies, with provision for more individually-paced, clearly-specified and sequenced learning activities, as well as the integration of academic activities with the world of work. Flexibility is necessary in providing alternative educational programs, sometimes located away from traditional campuses, to serve students with special needs. Such programs can include independent study centers, continuation schools, and special classes designed to teach students personal and study skills.

Schools serving similar student populations differ in their actual dropout rates, despite the fact that their predicted dropout rates were the same. Structural variables which researchers believe may be related to lower dropout rates include: neighborhood versus system-wide attendance boundaries; cohesive, supportive student body; cohesive, supportive community; school safety; school discipline; extent of extracurricular activity; course grading policies; amount of homework assigned; and type and degree of support for less able students. This research should alert educators to examine structural elements of schools which can be modified to provide a higher quality of life for students. Particular care should be given to redesigning systems (like Average Daily Attendance and the traditional notion of high school completion within four years) which may actually be counterproductive to monitoring and retaining students.

A salient finding of several programs targeted to high-risk students is that individual attention matters–simply the fact that someone cares enough to help makes a difference to these young people.

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Policy Analysis for California Education

Policy Analysis for California Education, PACE, is a university-based research center focusing on issues of state educational policy and practice. PACE is located in the Schools of Education at the University of California, Berkeley and Stanford University. It is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. PACE operates satellite centers in Sacramento and Southern California. These are directed by Gerald C. Hayward (Sacramento) and Allan R. Odden (University of Southern California).

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in California, (2) analyzing state educational policy issues and the policy environment, (3) evaluating school reforms and state educational practices, (4) providing technical support to policy makers, and (5) facilitating discussion of educational issues.

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Dropping Out: A Preschool Through High School Concern

Americans generally hold the belief that success comes through education. Certainly, in many fields, the years of schooling required for employment have risen dramatically. In 1983, a survey of 643 employers revealed that 82 percent of all jobs required a high school diploma (Malizio and Whitney 1984). Despite this emphasis on education–and more specifically, completion of high school–thousands of students continue to drop out. Moreover, some professionals believe that the current emphasis on higher academic standards, accompanied by increasing rigidity of secondary school curricula, will result in more dropouts. They contend that these young people will experience increased frustration in trying to cope with additional requirements, while having fewer opportunities to select electives that appeal to their individual interests (Natriello et al. 1985).

Statistics document the reality that most dropouts are severly handicapped by their lack of a high school diploma. Although there is variation within these statistics, most young persons who drop out earn less than their counterparts who have a diploma. In addition to lower earnings and higher unemployment, other problems facing a majority of dropouts include: lack of employment alternatives, lower status and discrimination, loss of self-worth and confidence–in short, a reduced quality of life. Since parents' level of education seems to affect dropout behavior in their children, the problem has an intergenerational aspect (Rumberger 1983), and its effects extend beyond individual and family levels in the form of higher rates of criminal activity and alcohol and drug abuse. Additional costs to society include the lower productivity attributed to such youth and welfare payments to those unable to find employment.

Framework for Examining Dropouts

By focusing on the specific act of dropping out and emphasizing associated consequences, educators have often neglected the search for earlier clues. As students progress through the grades, their experiences shape their thinking about school. In the early grades, students may not be able to demonstrate negative attitudes toward school by dropping out, but they may be forming an orientation that promotes dropping out later. School factors are most frequently cited by youth as reasons for dropping out.

This analysis begins with a list of characteristics generally associated with dropouts. The list provides a framework for examining problems encountered by students as they progress from preschool through high school. Included in the analysis of problems encountered at each level of schooling is an overview of selected programs as well as

commentary on existing gaps in services. Where relevant, problems specific to SES, race, ethnicity, and gender are included.

There is a serious lack of information about dropout prevention programs, both descriptions and evaluations. This makes it difficult for schools to replicate particular programs. Appendix A contains information on publications which attempt to identify model programs, including one by the California State Department of Education and another by the U.S. Department of Education. Appendix A also includes information about a study to determine the effectiveness of specific dropout programs. For those interested in obtaining further information, Appendix B contains references for many of the programs mentioned in this paper. The selection of programs in Appendix B was drawn from literature that characterized them as outstanding rather than by systematic evaluation.

Characteristics Associated with Dropouts

There is considerable variation in dropout rates according to age, socioeconomic status (SES), race, and ethnicity. In fact, the term "dropout" describes a wide range of students in different school districts. Since there is no standard definition of the term, comparisons of various intervention programs and outcomes are difficult. Nevertheless, the following characteristics have been found to be strongly associated with students who drop out of school:

1. Low or failing grades and low standardized test scores
2. Placement in a remedial academic track
3. Bored or apathetic attitude toward school
4. Chronic truancy
5. Over age for a particular grade
6. In-school delinquency
7. Parents who did not complete high school
8. Family with serious economic problems
9. Family headed by a single parent (although the absence of natural parents in itself may be less important than associated financial problems)
10. Minority group status (ethnic, racial, linguistic, or cultural)

11. Social isolation from peers (less participation in academic and extracurricular activities)

12. Low academic self-esteem (perception of ability to succeed at academic tasks)

13. Low sense of personal autonomy (power to influence the environment and to effect desired outcomes)

14. Low educational and occupational aspirations (Although their overall model does not predict well, Wehlage and Rutter, 1984, found that the most powerful predictor of a student's completion of high school was his or her own expectation of eventual educational attainment.)

15. Teenage marriage or pregnancy

It is important to qualify this list by pointing out that research in this area continues to refine our understanding of the characteristics associated with dropouts. In particular, several studies are employing an historical approach which identifies students who have dropped out of high school and traces their experiences back to elementary school. Profiles are then created in an attempt to determine student characteristics which have the greatest predictive value for identifying potential dropouts. Florida Atlantic University, for example, is currently involved in this type of research, which also includes a comparison group of students who graduated from high school with no serious academic problems (Ehren 1985, 1-2).

Recent studies challenge the more common stereotypes. For example, a recently completed profile of 105 Redwood City, California students who dropped out of Sequoia High School in grades 9 and 10 during the 1984-85 academic year suggests a somewhat different picture (Turner 1986, 4-5). In this study, the largest proportion of dropouts were white, non-Hispanic, with the majority having attended local schools for at least seven years and half of them having attended three or fewer schools during their elementary years.

Bearing in mind these qualifiers, school factors are most frequently cited by youth as reasons for dropping out. This paper focuses upon these school factors, although aspects of family background and individual attitudinal traits are also included in the discussion.

Preschool

For an increasing number of children, preschool, rather than first grade, represents their first exposure to an educational system. These experiences vary widely in goals, content, and methods of instruction.

Many programs which receive federal or state aid at this level, such as Head Start, are compensatory in nature, that is, they focus on narrowing the knowledge and cultural gaps between mainstream, middle-class white children and children from other racial, ethnic, linguistic, or economically disadvantaged backgrounds. Since minority children are considered to be more at risk of dropping out, it is helpful to examine educational interventions designed for them.

The main goal of such compensatory programs has been to help enrich entry-level academic knowledge and experiences of minority and economically disadvantaged children so that they begin elementary school on a more equal footing with their more advantaged peers. Although some studies show no significant results of such early intervention programs, several studies indicate that compensatory programs have had a positive effect (Ravitch and Riddel 1986, ii). These studies found that such interventions make cost-effective improvements on educational achievement and later success beyond what would have occurred without the program (as measured by grade, degree attainment, employment, and earnings). The earliest interventions seem to be especially significant, according to some studies (see Ravitch and Riddel 1986).

Carter (1983), on the other hand, feels that compensatory programs do not improve school performance. He contends that the compensatory model fails precisely because it is based on the assumption of cultural deficits–consequently generating low expectations for student success. In particular, approaches which focus on helping children make as rapid a transition as possible to English fluency may adversely retard children's abilities to deal with abstract concepts and logical thinking (Cummins 1976; Doebler and Mardis 1981; Kessler and Quinn 1980). This occurs as a result of requiring children to deal with academic concepts in a language they are just beginning to learn, when only their first language is developed enough to permit such conceptual and abstract thinking. Experiences like this may contribute to students' negative perceptions of their abilities to be successful in school–a characteristic related to dropping out later. Here, as elsewhere in this and related fields, research findings are inconsistent.

Although people have generally focused upon deficits in children's entry-level academic knowledge, it may be more important to look at their attitudes toward the educational system. Ogbu (1978, 1983) contends that minority children bring to school an attitude that the system is stacked against them. This may contribute to children feeling less power to influence their own outcomes in school–a factor related to dropping out later. Ogbu

contends that because of this fear of having to give up their culture, minority children decide not to put much effort into school. In interviews conducted with black parents of preschool children, Ogbu found that black parents consistently expressed distrust of the educational system as run by whites. Black parents felt that the type of preschool programs available to white children provided superior educational programs compared to those providing services mainly to black children. The black parents felt that whites teach their children more than they teach minority children.

Ogbu also thinks that minority children often feel they must give up their own cultural values and ways of thinking in order to be successful in school. To deal with this, Ogbu (1971) suggests that children be taught those values that are instrumental for success in school as a means of achieving later career and economic success but without diminishing or having to deny their own culture.

Some have observed that educational gains among parents of young children may be reflected in additional gains for their children. Especially pertinent to intervention strategies for disadvantaged children is Rumberger's study (1983) indicating that the effects of family background are stronger for youth of lower SES families. He cites the finding that a one-year increase in mother's educational level reduces the problem of dropping out by four percentage points among white female children from a lower SES family, but only two percentage points among white female children from a higher SES family.

To emphasize the importance of integrating parent education with that of their children, four states (Missouri, South Carolina, New York, and Texas) now provide reimbursement to local school districts that run effective parent education classes, early detection screening, and remedial programs for high-risk children, ages one to four (Hahn et al. 1987).

The value of preschool programs for disadvantaged children has been most convincingly documented by the Perry Preschool study (summarized in Ravitch and Riddell 1986, i-ii). This longtitudinal 15-year study compared economically disadvantaged children who participated in this preschool with children of similar backgrounds who did not attend preschool. When compared to nonparticipants, those 19 year olds who participated in preschool were more likely to have graduated from high school (67% vs. 49%) and enrolled in postsecondary academic or vocational training (38% vs. 21%). The average number of months of unemployment since leaving high school was 4.9 for the preschool group versus 10.3 for nonparticipants. Preschool participants were less likely than nonparticipants to have had a criminal arrest record (31% vs. 50%) or to have registered for general assistance benefits (19% vs. 41%). For every $1 invested in preschool programs, researchers estimated that there was a return to taxpayers of $4.75 in reduced crime, welfare, and public education costs and increased earnings and tax revenues (Weikart 1980).

The Perry Preschool was a costly and sophisticated program compared to most other preschool programs. For example, the staff to child ratio was 1:5, and weekly one-and-a-half hour teacher home visits were made to each mother and child. Nevertheless, as indicated above, studies of other preschool programs have reflected their positive influence on children's later school achievement and attainment. However, not all studies have supported this view (summarized in Ravitch and Riddell 1986). Evidence on the near-term effectiveness of preschools remains mixed, and existence of longitudinal data on cognitive as well as dropout impact is extremely rare.

Elementary School

Many school systems have become interested in generating early identification systems to alert personnel to children at risk of dropping out. Advocates of this approach argue that such identification systems can lead to early intervention and remediation of problems. Those opposed to such systems express concern over the potential negative effects of early labeling.

With respect to the need for early identification of potential dropouts, Bullis (1985) has developed a checklist for screening youth on the Jicarilla Apache Reservation which represents a departure from many checklists currently being devised. Although initially designed for high school youth, Bullis' approach may be useful in elementary school. By means of this checklist, a pool of students experiencing high stress (emotional, academic, social) is identified. This pool is then broken down into several groups, based on their risk of dropping out as well as the degree of support available to them from family, peers, and others. Students are classified as being high, low, or average on stress and support.

Youth identified as high stress/low support participated in a comprehensive intervention program. This included individual and group counseling provided through the schools, an Outward Bound-type program which emphasized personal competency and group interaction, and a directed effort on the part of school counselors to help locate or create support networks for the students within their families and communities. Without addressing students' school performance or achievement, results after one year showed statistically significant gains in school attendance, academic achievement, and retention.

This has implications for the elementary school level: if students can be effectively identified and worked with in high school, couldn't they be screened in elementary school to alert teachers, principals, and parents to potential problems?

As the basis for generating a checklist which could be used as a screening device, we turn now to a more detailed examination of each of the dropout characteristics listed earlier.

Low Or Failing Grades

Although most models of dropout behavior do not predict very well, findings consistently indicate that unsuccessful academic experiences–poor classroom performance and failing grades–are correlated with the dropout rate among disadvantaged youth (Branch et al. 1985, 1).

Intervention strategies must distinguish the reasons for students' failing grades. In this discussion, we concentrate on the needs of disadvantaged youth who are having difficulty meeting the minimum requirements of the curriculum, but we also include some observations about special needs of gifted children.

As noted above, many children enter school at a comparative disadvantage because they do not bring with them the background knowledge and skills required by the educational system. One of the most important of these is oral language competency. It is especially critical in the early years of elementary school when children are expected to acquire basic reading skills. Researchers from the Department of Research and Evaluation in the Chicago Public Schools recently completed a study of reading achievement and entry age, as related to students' dropout rates. Their research indicates that "reading achievement and entry-age, in contrast to race and gender, can account for most of the predictable variation in students' dropout rates" (Schultz et al. 1986).

Most reading theorists agree that there is a strong connection between spoken and written skills, and that beginning readers depend upon their knowledge of oral language when learning to read. The foundations for oral language are usually acquired through parents. If parents have difficulty reading, children are likely to have poor vocabularies. This places children at an initial disadvantage when entering school. In addition, the amount of reading done at home and parents' level of education have been correlated with children's school achievement (Zagorski 1981, Bachman et al. 1978). Of special relevance to these issues is a recent study that provided parents with training in child rearing and activism. When compared with a group of parents who did not receive the training, the treatment group reflected improvements in the family's life circumstances, a 15 percent gain in their children's IQ scores, and a 38 percent gain over elder siblings who grew up before their parents participated in the training (Karnes et al. 1980).

Most learning tasks are structured sequentially, with success in a given unit of instruction dependent upon the degree of mastery a child acquired in previous tasks. Research on mastery learning indicates that the level of cognitive skills which a child brings to school explains approximately 50 percent of the difference in achievement among students. Students who enter first grade with poor oral language skills are frequently identified as poor readers in the 4th grade and on into the 8th grade (Sticht, cited in Berlin

and Duhl 1984, 13). Since reading comprehension is essential to the learning which takes place in school, poor readers are low academic achievers. In view of the importance of reading, researchers from the Department of Research and Evaluation of the Chicago Board of Education recommend prevention policies "that will increase students' reading achievement before entry to high school, without retention" (Schltz et al. 1986, 9).

Cognitive achievement of students may be differentially affected by the traditional summer break from school. Barbara Heyn's study (1978) of 5th and 6th graders revealed that, in contrast to relatively advantaged children, poor children were more likely to remain level or regress in their learning during the summer months. Heyn indicated that 80 percent of the learning differential that occurred each year between the most advantaged and least advantaged students was a result of these differences in learning rates over the summer.

Although this summer learning decay problem has not been found in all studies, it has been confirmed by several studies of Title I and Follow-Through, as well as a study of college students in the City University of New York (Coleman 1982, Kapsis and Protash 1983). This has also been confirmed in studies of California Assesment Program test results by the California State Department of Education.

One elementary school program written in English and Spanish and designed to prevent early school failures is the Early Prevention of School Failure Program in Peotone, Illinois (California State Department of Education 1985-86). Assessed as a successful program by the Sharing Educational Success Traveling Seminars in 1982, this program involves early identification and remediation of developmental learning problems which might adversely affect later school performance. Materials include screening instruments, classroom management and activity guides, and parent materials.

An innovative approach to dealing with low-achieving elementary students is currently being designed by Henry Levin of Stanford University. Professor Levin's project involves two elementary schools in the San Francisco Bay Area which will implement an accelerated curriculum for low-achieving students. Levin believes that the compensatory models of education often used for such students slow down their academic progress to such an extent that they are never able to close the gap in achievement with their peers.

Placement in Remedial Track

Placement in remedial academic groupings refers to the grouping of students into instructional subgroups on the basis of achievement, abilities, and needs. In elementary school, this is called "ability grouping," and in junior high and high school it is referred to as "tracking" or "laning." Theoretically, such grouping facilitates the learning of students of like ability by minimizing the diversity of students being instructed.

The asserted disadvantages are the negative effects of labeling, that is, rather than being a help to such children, ability grouping sets them apart as slow learners, and the grouping intended for one academic task becomes inappropriately generalized to include other subject areas.

Low Academic Self-Esteem, Low Educational or Occupational Aspirations

Although much of the research has focused on ability grouping, other factors may also have a powerful influence upon students' perceptions of their academic competence, specifically, low academic self-esteem, low educational or occupational aspirations, and low sense of power, all of which are factors associated with dropping out.

Cohen (1971, 1982) has shown that in racially or ethnically mixed academic task groups, students of the majority group dominate decision making, regardless of who may be more competent to take the lead. Minority students are relegated to low-level roles in group decision making and task completion. This reinforces the stereotypical thinking of all participants that high-status students are more academically competent. Cohen has conducted experiments which involve changing the expectations of low-status and high-status students. This has resulted in more closely equalizing the contributions of all members to the completion of a task.

Cohen and DeAvila's work (1983) indicates that children of different ethnic and linguistic backgrounds can experience significant advances in math and science elementary curriculum through an instructional technique that requires students to act as teachers to one another. Slavin (1978, 1981, 1984) has also done research on cooperative learning methods in the classroom with upper elementary and older students. His work indicates that relationships among students improved as they worked together, and the solutions they generated as a team accelerated their achievement growth.

An interesting effort to sensitize classroom teachers to possible attitudinal and instructional biases they may have towards low-achieving students is represented by Project TESA in Downey, California (California State Department of Education 1985-86). Teachers (kindergarten through college level) are involved in a series of training workshops designed to sensitize them to their patterns of interaction with different types of students. Teachers are then taught methods of providing equitable support and motivation to their students. A three-year follow-up study of participating teachers indicated that low-achieving students in these classrooms demonstrated significant academic gains and a reduction in absenteeism.

An interesting motivational challenge involving a kind of school-business partnership occured in 1981, in an elementary school in Harlem. Eugene Lang, a wealthy

businessman, tore up his prepared commencement speech and promised the graduating class of his alma mater that he would pay for each student's full college tuition if he or she graduated from high school. Five years later, all the students qualified for Mr. Lang's offer (Hechinger 1986). Along similar lines, enough money has been raised in Dallas to partially support all 6th graders in six schools who complete their education and go on to college (Hahn 1987). The "I Have a Dream" Foundation in the Los Angeles Unified School District represents another attempt to expand students' educational horizons.

Bored or Apathetic Attitude Towards School

One approach used to deal with apathy is to give students a level of academic challenge appropriate to their needs, including realistic feedback on their progress and positive reinforcement for material learned. The needs and interests of individual students are acknowledged and incorporated into the curriculum whenever possible.

A school characteristic relevant to student satisfaction is school size. Some studies indicated that in smaller schools (300-400 students or fewer) there seems to be more order and stronger satisfaction with school life, and students appear to achieve better (Kaplan 1985, 14; see also Guthrie 1979).

The Early Success in School K-3 Project in San Rafael, California (California State Department of Education 1985-86) is based upon the view that prevention of school failure requires developing children's positive attitudes towards school and classwork. In addition, there is an emphasis on teaching thinking skills.

Many school districts are trying to define the school experience in broader terms, by including after-school and weekend activities, summer camps, and weekend activities which incorporate community agencies and facilities. An example of such a program is found in the Sarasota County School District, Florida (Program Descriptions and Interim Reports 1985).

In many schools, parent participation in the above kinds of activities is being encouraged, and attempts to facilitate parent involvement are reflected in creative scheduling of events which takes parents' work schedules into account . These structural modifications aspire to make schools more relevant to students and their parents.

Chronic Truancy

Frequent absences, of course, imply missed opportunities. This can lead to poor grades and may result in a child repeating a grade and being over age the following year. This pattern is cyclical and very difficult to break, once begun. In view of the many and often competing demands upon teachers' time, the seriousness and immediacy of individual student learning problems is frequently not acknowledged until the end of the school year. Often, the only option then remaining is retention.

Over Age for a Particular Grade

The relationship between repeating a grade and dropping out is dramatic. Data indicate that students who are held back a grade are 40-50 percent more likely to drop out than those students not retained. Those retained two grades are 90 percent more likely to drop out (Bachman 1978). In view of this, it is clearly important for teachers to identify learning problems as early in a school year as possible and utilize all available resources for the remediation effort.

In-School Delinquency

In-school delinquency may be an indicator of many different student problems, including difficulties at home, individual emotional problems, conflicts with peers, and frustration or boredom with school. Elementary counselors can provide assistance in such situations, sharing expertise with teachers, students, and parents; coordinating available resources; and making appropriate referrals. Unfortunately in California, students in grades K-8 have almost no access to counselors. The counselor to student ratio for grades K-8 in 1986-87 was 1 to 2,000 (California State Department of Education, School Climate Unit 1987).

Project FREE in Auburn, California (California State Department of Education 1985-86) is designed for early detection and prompt intervention with elementary age children experiencing behavioral, emotional, or social difficulty. This program also incorporates parents into intervention efforts.

Elementary school may be viewed as a "holding pond" for young students in the educational mainstream. They do not yet have access to alternatives and they are reasonably "contained" for instruction. This may be the best time to identify students' strengths and weaknesses and provide assistance. Some intervention techniques include

both children who have difficulty learning required tasks as well as highly gifted children whose needs may not be met through required curriculum instruction.

Junior High

Usually separate from elementary school, junior high reflects a different type of organizational structure, content, and method of instruction. The familiar boundaries of elementary school have given way, and students are expected to assume increasing responsibility for their behavior.

What happens educationally at this stage is critical, as students draw closer to translating negative attitudes towards school into dropout action. The California compulsory school attendance law requires youth under age 18 to be in school. There are penalties for parents who do not observe this law, but enforcement of compulsory attendance is lacking in most districts. In fact, many dropouts are under the age of 15–40 percent of Hispanic dropouts leave school before 10th grade (An Action Plan 1985, 1). For more information on the special educational needs and problems of Hispanic youth, refer to Meraz (1986).

There has been recent interest in recruiting small groups of volunteer teachers to attend summer planning and work sessions to learn alternative teaching strategies for students having difficulty with existing educational programs. Included in many of these teacher workshops are techniques for positively channeling student behavior. In some programs, teachers are given a modest stipend and are involved in designing checklists which will be used to identify at-risk students, for example, Metcalfe Elementary and Howard Bishop Middle School, Alachua County, Florida (Program Descriptions and Interim Reports 1985).

Characteristics most associated with dropouts in junior high are poor grades and test scores, placement in a remedial track, bored or apathetic attitude toward school, chronic truancy, over age, in-school delinquency, family with serious economic problems, low academic self-esteem, low educational and occupational aspirations, and teenage marriage or pregnancy.

Low or Failing Grades

In some ethnographic studies, students with poor grades said that they felt school was important, in spite of the reality that they were falling further behind and had begun to feel that any effort was hopeless (Berlin 1984, 12). The eventual result is reflected in the

statistic that 50 percent of junior high students who enter high school with a D average will drop out (An Action Plan 1985, 1).

Many studies (Coleman, Hoffer, and Kilgore 1982; Keith 1982; Paschal, Wienstein, and Walberg 1983) indicate that the amount of time and effort students spend on homework has a modest positive relationship to their grades. In junior high, peer group influence is considerable, especially for those young persons with low self-esteem who are unable to identify positively with school. Peer pressure among dissatisfied students in junior high may induce students not to complete homework assignments, making it difficult to keep up with their classes.

Individually designed and self-paced curricula with smaller classes and greater flexibility may ease the difficult transition from a single teacher in a self-contained elementary school classroom to the oftentimes less personalized learning in departmentalized classes taught by different teachers. In particular, such individualized programs may reduce the sense of academic failure and low self-esteem characteristic of low-ability youth. Such programs, of course, require extra financial resources.

There are, however, ways of personalizing the school experience which do not entail additional expenditures, for example, peer tutoring. Some schools have found that assigning junior high teachers to act as personal advisors to a small number of incoming junior high students helps smooth the transition from elementary to secondary school. In this expanded role, teachers can be a source of valuable information about the needs and problems of students, particularly if they maintain the personal connection with students throughout the time the students are in school.

There is evidence to suggest that increased teacher expectations will lead students to work harder, at least if the original standards have been quite low (McDill et al., 13).

Natriello and Dornbusch (1984) conducted a series of studies which examined standards of high school teachers and students' responses to those standards. The studies indicated that a higher level of teacher demand was related to greater effort by students in the classroom, even when the ability level of the students was statistically controlled. However, Natriello and Dornbusch also found that low-ability students can get lost in high-demand classrooms and that they need additional help in trying to meet the more demanding standards.

A Cleveland school district has incorporated an unusual approach to reducing dropouts, targeted to students with failing grades and behavior problems. This small program involves 30 fifteen-year-old students who are offered jobs if they stay in class and improve their grades. In addition, these students are given remedial instruction, counseling, and a chance to have a meaningful dialogue with adults. Each youth, youth's parent, school administrator, and employer signs a contract to participate. James Hyman of Cleveland's

Private Industry Council reported that the job opportunity attracts students to the program but "the thing that keep them moving is getting special attention from people" (*Ed. USA* 1985, 348).

Placement in Remedial Track

Ability grouping or tracking is based upon three assumptions. First, variations in ability necessitate separate educational treatment. Second, ability is stable and not affected by educational treatments. Third, it is possible to accurately categorize students according to their learning potential (Assembly Office of Research 1985, 58).

Students who leave school before graduation are likely to be in the general or remedial ability tracks. Tracking is practiced in California's secondary schools, although state regulation forbids schools from tracking educationally disadvantaged secondary school students for more than two periods each day in state and federally funded compensatory programs (California Admin. Code, Title IV, Section 3934).

The report *High School and Beyond* revealed that in 1980, 40 percent of Hispanic sophomore students were in a general track, compared to 36 percent of all sophomores (Assembly Office of Research 1985, 60). A higher percentage of minority and economically disadvantaged are in the lower and general groupings, and a higher percentage of upper income students are in college-bound tracks (Assembly Office of Research 1985, 59). Mobility among tracks is very difficult, particularly from a lower to a higher track.

Rist (1970) found that students may be assigned to groups on the basis of educationally irrelevant characteristics, such as type of clothing or degree of cleanliness. Research by Cazden (in press) and Oakes (1982, 1983) indicates that placement in lower ability groupings oftentimes means that such students receive inferior instruction (content and method), thereby perpetuating the educational deficits which were intended to be reduced as a result of being assigned to such groups. Oakes found that students in lower tracks are generally taught by less experienced teachers, receive less academic instruction, have lower self-esteem, and achieve at a lower level than students in higher tracks.

The *Paths Through High School* study examined the content of tracks in California high schools and found that students in general and remedial groupings received less academic instruction than students in college-bound tracks–an average of one hour less per day (Assembly Office of Research 1985, 61). Teachers also voiced difficulties in planning courses for students in the two lower tracks because of the unavailability of appropriate teaching materials and greater student absenteeism and transiency (Assembly Office of Research 1985, 61).

Rist emphasizes the inflexibility of such ability groups. He found that, once assigned to a lower ability group, students are rarely "upgraded" and reassigned to higher ability groups in later years. Garet and DeLany (1984, 1986), in contrast, found that course-taking patterns as revealed in student transcripts are actually quite diverse. That is to say, despite common wisdom to the contrary, these tracks are not rigid for all subjects that a student selects.

Bored or Apathetic Attitude Toward School

Bored and apathetic feelings are often correlated with chronic truancy, in-school delinquency, low educational and occupational aspirations, low grades, and over age for a particular grade. Students who experience academic frustration need individualized instruction, competent teachers, sequential planning of goals and objectives, and meaningful feedback and evaluation. But junior high is often a place where students are most unlikely to encounter the supportive learning environment they need.

Jacquelyne Eccles, at the University of Michigan, looked extensively at decision-making opportunities available to junior high students and found that junior high teachers "actually believe students should make fewer decisions than elementary school teachers believe they should make" (Midgley and Feldlaufer 1986, 13). This finding is consistent with evidence from the *Transitions in Early Adolescence Project* in which junior high teachers were found to trust students less and to be more oriented toward control and discipline than elementary teachers (Midgley and Feldlaufer 1986).

By the time they reach junior high, the majority of low-achieving students have focused their aspirations upon the world of work rather than additional education. These students may perceive schools as a barrier to what they would like to do, that is, get a job. In order for these students to view school positively, they must be given help to achieve instructional goals, as well as experiences which connect school with work or later educational opportunities.

In response to the need for positive social relationships, Gary Wehlage, of the University of Wisconsin (*Ed. USA* 1985, 348), found that alternative school-based programs work when the school environment is altered and a different relationship formed between students and the school. Wehlage and his colleagues have been working on a model program for at-risk students which incorporates key features such as small size, personalized instruction, collegiality and shared decision making among teachers, volunteer student body, clear objectives, prompt feedback to students, academic learning along with sex education, parenting classes, and experential learning (combining educational and work experience). Also included are experiences in which students "shadow" adults in specific occupations and paid internships. Although results from pilot studies using this model

program vary, outcomes indicate that the model can have positive effects on a number of personal and social orientations for at-risk students (Wehlage and Rutter 1986).

Experential education not only provides a change of scene for youth who have experienced repeated frustration within a traditional school environment, it also provides an opportunity for development of the whole student. According to Wehlage, outside experiences help students see beyond basic skills and a job to involvement in positive social roles (*Ed.USA* 1985, 348).

Recent emphasis upon increased graduation standards and proficiency testing has led to a narrower academic curriclum in many junior high schools. Some educators are concerned that the restricted curriculum may lead to an increase in dropout rates because students have fewer opportunities to select electives of special interest to them and fewer chances to experience success outside a standardized curriculum (Association for Supervision and Curriculum Development 1985, Tye 1985).

Another aspect of student apathy is mirrored in the fact that a large number of students at risk are uninvolved in extracurricular activities. The West Virginia Dropout Study, 1984-85 (West Virginia State Department of Education 1986) underscored this lack of involvement by revealing that more than 93 percent of their dropouts seldom, if ever, participated in extracurriculuar activities. Many schools are attempting to improve the student-school connection by promoting school spirit and encouraging more involvement in school-related activities.

Chronic Truancy

Frequent absences imply missed opportunities for learning. This can result in low or failing grades, which may lead to retention and thus over age the following year. This pattern, once established, is very difficult to change.

The compulsory school attendance law requires youth under age 18 to attend school and includes penalities for parents whose children do not observe the law. However, enforcement remains a relatively low priority for most probation departments, district attorneys, and courts (An Action Plan 1985, 1).

The school finance system depends heavily upon Average Daily Attendance (ADA), a count of students in school. ADA provides an incentive for school districts to maintain high levels of student attendance, since 83 percent of their state and local funding is based on ADA (Assembly Office of Research 1985, 71). Unlike other states, California includes excused absences in calculating ADA (Assembly Office of Research 1985, 72). According to this policy, if student excuses are determined to be counterfeit (for example, student

authored), the absences cannot be included in ADA, resulting in a loss of funding for the school. Under these circumstances, California schools are penalized for checking the validity of excused absences.

The ADA system usually involves counting students in homerooms at the beginning of a school day. However, if students attend homeroom but are not present for the remainder of the day, they are still counted as present. Advocates of more rigorous attendance laws have called for expanded attendance monitoring services. Some school districts have mandated counting student each class period, sometimes referred to as "hot seat attendance" (Assembly Office of Research 1985, 73).

Distribution of general operating revenues based in part on ADA does not reward individual school efforts to improve attendance (Assembly Office of Research 1985, 73). According to state law, these revenues are given to a school district and then re-allocated to all or a portion of schools in the district. There is no mechanism to reward an individual school's efforts in reducing truancy. Since individual schools may not benefit financially from increased attendance, they may be more conscious of the benefits to be gained in terms of improved classroom discipline and school climate by allowing problem students to drop out of the system (Assembly Office of Research 1985, 74).

Chronic truancy results in students falling behind in their academic work, and contributes to poor grades. Truancy can be related to academic and social factors. Efforts to improve attendance often include student counseling to determine the reason(s) for student truancy and to aid in designing relevant interventions. Studies such as that conducted by the West Virginia State Department of Education (1986) indicate that many students do not talk with school personnel before they decide to leave, suggesting a need for closer connections between school personnel and students.

The problem of chronic truancy has led some schools to pilot programs that reinforce student attendance. For example, several inner city schools in Boston have initiated an attendance reward program which randomly selects students and checks whether or not they are present in their assigned classes. If present, the students receive such rewards as gift certificates for hamburgers, movie passes, and the like (Hechinger 1986). In an unusual approach to reducing truancy, Wisconsin has become the first state to cut a family's welfare benefits if a teenager skips school. The program, known as "Learn Fare," is an attempt to reduce dropout rates and encourage inner-city youth to return to school by withholding the share of a family's welfare grant which would have been targeted to the truant youth. Wisconsin is the only state with a waiver of federal welfare rules to implement this program, which will go into effect in January 1988.

Over Age for a Particular Grade

Over age most often results from students failing a grade. The problem is particularly significant among Hispanics–25 percent of Hispanics leave junior high and enter high school over age (An Action Plan 1985).

Numerous studies document the adverse effects of students being held back a grade. Bachman and Olsen (1971) found that if students are held back one grade, their likelihood of dropping out is 40-50 percent. Those students who fail two grades have a 90 percent probability of becoming dropouts.

One traditional argument in favor of retaining students is that additional experience in the same grade will lead to increased academic achievement. Even when this does occur, however, recent research raises questions about the unanticipated outcomes of retaining students. Hess and Greer (1986) report that when over age high school entrants were compared with normal age entrants in a Chicago public school study, not only did the over age students drop out more frequently than normal age students reading at the same level, but over age students dropped out more frequently than normal age students who read at a lower level. Hess and Greer conclude that a strict retention policy, even if associated with improved reading scores, is likely to increase the number of students dropping out.

In-School Delinquency

Students who contribute to in-school delinquency are often suspended from school for several days. This approach results in students losing instructional time.

A program that provides an alternative to suspension is located at Willis Jepson Junior High in Vacaville, California. This program has been designated as a noteworthy practice by the California State Department of Education (1985-86). In this program, students work Saturday mornings in the school on maintenance jobs. Breaks in the morning schedule are provided through informal counseling sessions. While in this program, students are placed in a separate classroom during regular academic days and receive instruction in improving their study techniques. This program enables students to maintain a sense of connectedness with school rather than the isolation associated with suspension. Additional examples of alternative approaches to suspension can be found in the section on high school.

Family Has Serious Economic Problems

Economic problems are often cited as reasons why many youth drop out. A recent survey of American youth indicates that almost 40 percent of Hispanic males dropped out because of economic reasons such as home responsibilities, good job offers, or financial difficulties (Rumberger 1983, 201). In this survey, black and white males often cited economic reasons for dropping out–23 percent and 22 percent respectively. Females also indicated that they had economic pressures which led to dropping out of school. The percentages of young women who cited economics as the primary reason for dropping out were black, 15 percent; white, 14 percent; and Hispanic, 24 percent. Whether male or female, a disadvantaged background increases the probability that a student will drop out of school (McDill et al. 1985, 5).

Evidence indicates that teenage employment is more widespread than previously thought. Michael and Tuma (1983, 5) found that, in 1979, 25 percent of all 14-year-olds had at least part-time employment.

California child labor laws require that a person under age 18 must obtain a work permit requiring parental permission in order to be employed. In addition, the work cannot represent a danger to the students' education or health, and the work cannot exceed four hours on school days. The only condition under which youth 14-16 years old may work full-time is in situations of extreme economic hardship arising from the death or abandonment of the youth's parent or guardian. In these situations, students must attend continuation classes to continue their education (Assembly Office of Research 1985, 75).

Enforcement of child labor laws does not receive high priority. According to an official in the California State Department of Industrial Relations, Labor Standards Enforcement Division, "The situation is out of control in L.A. County. Anyone over 14 can get a job without a work permit" (Assembly Office of Research 1985, 75).

Time spent working detracts from time available for studying, both within and outside school. Pallas' (1984) work corraborated D'Amico's (1984) finding that for some students, extensive involvement in work had direct effects upon their dropping out. Moderate levels of work may be beneficial to secondary school students by providing them with information about the world of work and teaching them desirable work habits (Greenberger 1983, D'Amico 1984).

Several studies indicate that student time and effort on homework is positively associated with achievement (Keith 1982, Natriello and McDill 1984). Although junior high students have less opportunity to work than high school students, variations in number of hours worked affects the amount of time available for homework.

Vocational education classes have been the traditional means of correlating academic learning with the world of work. Although there have been attempts to provide youth with programs that include work opportunities along with academic classes, these have generally been targeted to high school rather than junior high students.

One exception is the Summer Training and Education Program (STEP). Initiated with a variety of public and private support, STEP conducted a pilot study with disadvantaged 14 to 15-year-old youth in the summer of 1984 (Branck et al. 1985). The program's goals were to improve school retention rates and labor market outcomes for participants. The STEP pilot program was targeted toward economically disadvantaged youth with significant educational deficiencies. Participants were given a chance to spend two summers in a program that included academic remediation and instruction in life planning skills, as well as work experience. The life planning component was designed to highlight the connection between the cost of raising a family, kinds of jobs needed to earn such an income, and the educational requirements of such jobs.

During the academic year between the two summers, the youth took part in a voluntary social support component designed to reinforce the learning gains achieved during the first summer and to create expectations for similar gains in the future. Although still in its early stages, the pilot model was found to be successful in generating significant academic gains, and this led to a six-site national demonstration in the summer of 1985 (Branch et al. 1985).

Programs linking school and work provide opportunities for junior high youth not yet old enough to compete for jobs.

Low Educational or Occupational Aspirations

Students' expectations of educational attainment have been found to be the greatest predictor of their eventual decision to drop out (Wehlage and Rutter 1984). That is, students who anticipate completing high school do so, while those who do not expect to finish, do not.

Parents' educational attainment affects the likelihood of a young person dropping out (Rumberger 1983, 202). According to Rumberger (1983), the probability of females dropping out of school does not seem to be related to the educational level of their fathers. However, the more education black and white mothers have completed, the less likely it is that their daughters drop out of school. The likelihood of young men dropping out of school seems to be affected by their father's level of education. The higher the educational attainment of black, white, and Hispanic fathers, the less likely it is that their sons will drop out of school. Black males also seem to be affected by their mother's level of education.

Some researchers interpret these findings as suggesting that children use their sex-linked parent as a role model in delineating how much education is realistic for them (Shaw 1982, Hill 1979).

There has been a considerable amount of research conducted on the relationship between teacher expectations and student achievement. Natriello and Dornbusch (1984) looked at the standards of high school teachers and student responses to these standards. They found that teacher standards differed for various groups of students and that blacks and Hispanics were subjected to lower expectations.

Treadway (1985) suggests that students who experience academic success and positive social interactions with other students will progress normally, view themselves as academically competent, and expect to graduate from high school.

Some programs for raising high school students' expectations of educational attainment are relevant to the junior high level. One such effort is Project Prep, begun in 1983 at Andrew Hill High School in East San Jose. Participating students are individually assessed to determine their learning needs upon entry, and close communication is maintained with the parents. Students receive additional counseling, their school attendance is monitored, and they are assigned only to teachers perceived as caring and competent (Dawson 1984). Preliminary reports indicate that students' achievement and attitude toward school have greatly improved. Hamilton's research (1982) focuses on the importance of a supportive environment for the success of new programs, such as Project Prep. His studies of the ecology of a school suggest that the introduction of a new program into a larger school environment characterized by impersonality and competitiveness renders the program ineffective in promoting intended changes in students' behavior and performance.

Counseling is another technique used to raise students' academic and occupational expectations, by providing young people and their parents with advice on school and career planning. This service bridges the informational gap for students whose parents do not have much educational experience or who lack external sources of information about such matters. California schools reflect a shortage of counseling services for students–in 1986-87, counselor to student ratios were 1 to 2,000 in K-8 and 1 to 400 in 9-12 (California State Department of Education, School Climate Unit 1987).

Teenage Marriage or Pregnancy

Although this problem does occur in junior high, it is most often associated with older students and is explored in the section on high school.

High School

High school is the last link in the chain of minimum educational expectations. As students enter high school they bring with them a considerable history of experiences–some positive, some negative. They also enter with a greater power advantage, in that they can legally elect to leave the system at age 18, with only part-time continuation education required after age 16. In most other states, students can leave school earlier.

High school poses a considerable challenge to dropout prevention programs–earlier indicators of potential dropout behavior have become full-blown issues in high school. This is not to imply, however, that all dropouts experience problems which date back to their elementary school years. Stern et al. (1985, 14) found that dropouts are nearly as happy as other students outside of school but are unhappier in school than other students.

According to this study, with respect to "...reported class-cutting and time spent on homework, expressed satisfaction and interest in school–sophomores who later drop out are more like seniors than they are like sophomores who do not drop out" (Stern et al. 1985, 15). This finding suggests that apathy and dislike of school is not restricted to dropouts, but is also reflected in the attitudes of other students, at least by the time they have had four years of high school. With this in mind, it seems that an important focus of research might be to examine why students stay in school, rather than only looking at why they leave.

Generally, those characteristics associated with dropout behavior that were examined for junior highs are also issues in high schools. In this section, therefore, only those aspects of dropout characteristics having particular relevancy to high school students will be highlighted. Background information for each characteristic can be found in the preceeding section on junior high school.

Low or Failing Grades

High school teachers are confronted with students representing a wide range of skills and abilities. Teaching is thought to be most effective when students are instructed at levels commensurate with their abilities. Students with a history of low or failing grades often enter high school over age for their grade. If students enter high school with a history of academic failure, special efforts are necessary to rebuild their confidence and help them to experience success with academic tasks. In recognition of these needs, many educators and policy makers are arguing for smaller classes and more individualized approaches to instruction than is generally found in traditional high schools.

Some high schools have experimented with alternative approaches to instruction for low-achieving students, such as continuation schools, alternative schools, and independent study centers.

Continuation education is the oldest alternative education program in California. It was established by the legislature in 1919 to provide a vehicle for employed students to complete high school on a part-time basis (Stern et al. 1985). Since their initiation, continuation schools have expanded the population of students served to include: pregnant teenagers or young mothers, emotionally or educationally limited youth, students with excessive truancy or behavior problems, students who enter the educational system at nontraditional times of the year (such as returning dropouts, juvenile offenders, or those in foster care), and students who are seeking an alternative to the traditional high school (Stern et al. 1985). As a result of legislative action in 1965, all California high school districts and high schools with 100 students or more in 12th grade must provide a continuation education program.

Continuation schools feature smaller classes and flexible scheduling and provide more individualized instruction than traditional high schools. These schools also provide personal attention and counseling to students, as well as occupational development services, and are often strategically located away from the regular high school campus. Most continuation schools also provide students with an opportunity to combine classroom work with vocational training. Basically, issues confronting continuation schools include the low graduation rate of students (10%), diversity of the student population, and the stigma of being a "last resort" for problem students.

Alternative schools and programs may exist separately or as schools-within-schools. In 1975, provisions were added to the California state education code that referred specifically to the establishment of alternative schools and programs (Stern et al. 1985). In a sense, continuation high schools do represent a form of alternative education, but the latter category includes a variety of other forms, such as those listed in Stern's report: schools-within-schools, satellite schools or annexes, alternative course offerings within traditional schools, or remedial programs intended to serve students on a short-term basis.

One such school which has been designated as a noteworthy practice by the California State Department of Education (1985-86) is the Apollo Program operating in North High School in Bakersfield, California. Another model program which embodies the school-within-a-school concept is the Peninsula Academy Program in California. Students in this program participate in regular school activities for part of their day as well as being enrolled in core academic courses in the school-within-a-school program. A particularly distinguishing feature of the Peninsula Academies is their strong connection with the business community and existing job markets. The 12 academies established in California cover health services, computers and electronics, hotel and restaurant occupations, and business and banking skills.

An example of an alternative program within a school (designed to keep students in school) is Project Prep at Andrew Hill High School in East San Jose. This program, begun in 1983, reflects a multifaceted approach, including individual assessment of entering students to determine their learning needs, emphasis upon additional counseling, attendance monitoring, and parent communication. Particular care is given to teacher selection (Dawson 1984). Preliminary results indicate that students' attitudes and achievement have improved considerably.

Some alternative programs have experimented with including other students, school administrators, teachers, and social workers in their intervention efforts for students at risk. Project Impact at Torington High School in Wyoming involves four components: (1) alternative curriculum for 9th and 10th graders in English, math, science, and social studies; (2) Student Service Room–counseling classes of 10 students with a social worker who is assigned to the school; (3) peer counseling provided by trained students; (4) in-service training for principals, counselors, and teachers to help them work more efficiently with high-risk students. After the first year, results indicated that the dropout rate for 9th graders fell from 7.1 percent to 2.4 percent and the dropout rate of 10th graders fell from 11 percent to 3.6 percent (Self 1985).

Project PATHE in Charleston, South Carolina (1980-83) was an alternative educational program for potential dropouts which examined the relative merits of changing the structure of schools versus providing an intensive program of individual student remediation (Kaplan 1985). Decision making on managing schools was shared among community agencies, students, teachers, administrators, and parents. The individual remediation program included academic and counseling services for these high-risk students. Results indicated that the program component which changed the management structure of schools was most successful. The direct instructional component was found to be marginally effective for high school age students, although there were some indications that the high school component had potential.

Both continuation schools and alternative programs provide more individualized instruction to students than is generally found in traditional high schools. This emphasis on a more personalized, student-centered approach to instruction is characteristic of many programs which deal with students at risk of dropping out. One such program of individualized instruction was the Comprehensive Opportunities Project (COP) in San Antonio, Texas, 1981-1982 (Manpower Demon. Research Corp. 1983). This project focused on individualizing programs for youth and included a wide range of services and benchmarks, or specific, measurable standards by which to assess students' progress. The findings of COP corraborated the benefit of individualizing services to meet specific needs of students. In particular, it was found that objectives for students should be few in number, clearly specified, and comparatively easy to measure (MDRC 1983, 15).

In addition to instructional programs targeted to keeping low-achieving students involved in their education, several counseling programs have also been designed to meet this objective. One counseling program specifically designed to retain low-achieving students in high school is "Helping Overcome Learner Dropouts (HOLD)," in Watsonville, California (California State Department of Education, 1985-86). Its goals are to increase student attendance, self-esteem, and academic success through monitoring of attendance, classroom guidance, and peer and parent counseling.

Another program frequently cited for its effectiveness in providing support to those at risk of dropping out as well as to those who already have dropped out, is Operation Success (California State Department of Education 1985-86). This is a cooperative program of the Federal Employment and Guidance Service, the New York City Board of Education, and the United Federation of Teachers. Services are comprehensive and include initial student diagnostic vocational evaluation and functional assessment, educational internship experience, outreach services, personal and family counseling, vocational skills training, career development services, community resource services, part-time job development, and employment and referral services.

A creative alternative to traditional ways of dealing with low-achieving youth is the Senior/Youth Partnership Tutoring Program in Sonora, California (California State Department of Education 1985-86). Work-experienced senior citizens tutor students in specific occupational information preparation and job placement as well as the achievement of high school diplomas or the General Equivalency Diploma (GED).

Recent concern over improving the quality of public school education has resulted in several calls for reforms at the high school level. One such reform is the establishment of a core curriculum for all students. Alexander and Pallas (1984) found that student completion of a core curriculum seemed to result in sizeable gains on seniors' scores on achievement and standardized tests. However, their study also shows that students with low grade-point averages seem very little affected by completion of core classes.

Another series of studies suggest that narrowing the curriculum may have an adverse effect upon how students view their academic ability (Rosenholtz and Rosenholtz 1981). When students are placed in educational settings where they must all work on the same tasks with little opportunity to choose among alternatives, students are more likely to think of ability as fixed and generalizable across all tasks. In contrast, when students have an opportunity to select a variety of classes, ability is viewed as a characteristic which varies according to different contexts. Rosenholtz and Rosenholtz conclude that the idea of a single classroom structure leads to lowered teacher and student evaluations of lower-ability students. Lower-ability students then incorporate these negative views of themselves and perform at lower levels than might otherwise be the case.

The recent educational reform movement also suggests that teachers should raise their expectations for student achievement. It has been found that raising classroom academic standards generally has a positive impact upon student effort, and that this increase in effort leads to higher achievement. It is not clear, however, that this is true of all students in all situations (McDill et al. 1985). One effort to sensitize classroom teachers to possible attitudinal and instructional biases they may have towards low-achieving students is Project TESA, in Downey, California. Project TESA is described earlier in this paper, in the section on low or failing grades in elementary school.

Minimum competency testing has also been suggested as a desirable educational reform. McDill, Natriello, and Pallas (1985) were unable to locate any systematic evaluative studies on the effects of minimum competency testing on students at risk of dropping out. They indicate, however, that failure rates on these minimum competency tests are much higher for economically disadvantaged students and those from minority racial or ethnic backgrounds who already reflect higher dropout rates. Many educational researchers caution that raising standards without aiding low-achieving students to reach these goals may result in repeated student failure and frustration and this increased dropping out.

Although the recent educational reform movement has focused more on excellence than equity, a "new national commitment" to students most likely to fail academically may be emerging, according to William F. Pierce, executive director of the Council of Chief State School Officers (*Education Week*, May 6, 1987, 10). In a recent meeting of equity specialists from state departments of education, Mr. Pierce acknowledged the economic essentialness of helping at-risk youth and stated, "For the first time in a very long time, it seems to me that help is on the way." Terry Hartle, chief education counsel for the Senate Labor and Human Resources Committee, predicted that the 100th Congress would place particular emphasis on the needs of high school students who have not mastered basic academic skills.

Along with providing remedial help for low-achieving students, many educators suggest examining the evaluation and reward systems for academic achievement within the school. Some students who have experienced repeated failure within the system have low regard for traditional academic evaluation. Researchers and teachers working with such students have found that oftentimes alternative reward systems are preferred by students (McDill et al. 1985). These include: learning contracts with specific tasks and goals, grading systems based on individual effort and progress, and "token economies." The latter refers to rewarding gains in achievement by the granting of tokens which have value in and of themselves or which may be accumulated and redeemed for something else of value.

Failing grades may also be found among highly gifted students who express boredom with the lack of challenge in their classes and the perceived inflexibility of the regular

curriculum. A less likely but still possible situation is one in which a gifted student has a learning disability which interferes with understanding in a particular subject area. According to specialists in gifted education, learning problems are often difficult to detect among gifted students in high school if they have not been diagnosed earlier, since bright students have often evolved fairly effective compensating mechanisms by the time they are teenagers.

Bored or Apathetic Attitude Toward School

According to a study by Goodlad, high school teachers report "lack of student interest" as the biggest problem for them (Goodlad 1984, 72). A 1984 survey conducted by the National Association of Secondary School Principals indicated that "friends and sports ranked much higher for students than did teachers, classes, or learning" (Stern et al. 1985, 9).

Students who have been interviewed after dropping out of school frequently state that they felt bored or apathetic towards school because of low ability and the constant frustration experienced in trying to succeeed at academic tasks which seem unrelated to their present (or future) needs and interests. A smaller number of high-ability students attribute their boredom to the fact that the traditional curriculum was only more of what they had already known.

Individualized Instruction Programs

Some educators, mindful of problems associated with student boredom, have attempted to provide instructional settings that more actively involve students in determining educational goals and objectives. One such example is the Diversified Educational Experiences Program (DEEP) in Wichita, Kansas (California State Department of Education 1985-86). A unique aspect of DEEP is its emphasis upon alternative ways for students to create, gather, develop, and share information involving electronic as well as nonelectronic media.

Independent study provides flexible educational opportunities for students who might not otherwise attend traditional schools. In 1976, California passed a law which allows students to be included in a school's attendance count if they are in an independent study program under the coordination, evaluation, and general supervision of a certified employee within the district. Rather than being associated solely with low-achieving students, independent study options are attractive to a wide variety of students, including high achievers wanting to study advanced topics not in the curriculum, athletes or

performing artists who need flexible hours to fit their training schedules, and students who are sick or traveling with their families.

The opportunity to study by themselves, away from traditional high school settings, appeals to many students who find social or academic experiences unrewarding in their regular schools. Additionally, independent study provides opportunities for students to make up academic work during vacations or summers as well as to prepare for the California High School Proficiency Examination or the General Educational Development test.

State regulations require all participating districts to maintain files of independent study agreements made with students, including the title of the independent study and major objectives to be achieved, the method of evaluating student progress toward the objectives, the duration of the agreement and the number of credits to be earned, and the signatures of relevant parties, including the student (Stern et al. 1985).

Students in independent study programs generally meet with their teachers for a minimal amount of time each week and are provided with learning material, such as programmed learning packages, designed for one subject at a time. Students may choose to complete the required courses and receive a high school diploma. Schools that sponsor such independent study centers are allowed to count these students in their Average Daily Attendance for funding purposes. California teachers have estasblished a California Consortium for Independent Study (CCIS) to encourage implementation of the concept and to promote the exchange of ideas.

Magnet high schools are separate schools or schools-within-schools which offer students the opportunity of attending schools specializing in a given curriculum area. For example, the city of Sacramento features Sacramento High School, a magnet school-within-a-school which emphasizes the arts, as well as Luther Burbank High School, which features an academy of math, science, and technology. Although magnet schools provide students with opportunities to explore particular interests, the curriculum includes other courses necessary for a comprehensive education.

For many students who are bored or apathetic, flexibility in scheduling and individualization of instruction in educational offerings seem to be key factors in capturing their interest.

Some schools are attempting to deal with student apathy by trying to personalize the educational setting. One such example is the Experimental Program for Orientation (EXPO) in Aurora, Colorado (Ross 1983). This program has been in existence since 1980, and the number of staff members volunteering to work in the program grows each year. The focus of the program is on helping students with their transition into high school. As with other successful programs, students have to volunteer, and each student is

assigned one special teacher who functions as a mentor for any concern or problem. The program includes several informal opportunities, such as picnics for students and teachers to get together and develop a sense of community. Teachers participate along with students in workshops designed to teach study skills, time management, and the like. Meetings are held with sophomores and juniors who have successfully overcome adjustment problems in high school.

In a study that compared 30 EXPO students with a control group, those in the EXPO program earned grade-point averages nearly a full point higher than the others; were truant an average of 17 class hours, compared with 96.5 class hours for the others; and only one student dropped out of school, compared with seven in the control group. The EXPO experience demonstrates that effective preventative programs can be implemented with limited resources (Ross 1983).

Another approach to keeping at-risk students in school is reflected in a special class offered to 10th graders in Evergreen School District, Washington (Ward 1985). This class seeks to improve students' self-image and teaches the students goal-setting strategies and other techniques to help the transition to 11th grade. Flexible scheduling is essential if students are to have access to special classes such as this. In the Evergreen District, students are often withdrawn from physical education classes for three or four weeks to enable them to attend special classes.

Gifted students need the opportunity to test out of courses and receive credit when mastery is demonstrated. They also need to be able to accelerate their learning to keep pace with their interests and abilities.

Education In Combination With Work-Related Experiences

Research on successful dropout prevention programs indicates that individually designed and paced instruction which integrates academic and vocational subjects with relevant work experience helps many low-achieving students bridge the gap between school and the work place.

Vocational education programs have traditionally provided a connnection with the world of work. To offset the cost of maintaining the expensive equipment needed to teach occupational skills, individual districts sometimes join together and sponsor a vocational skills center which is shared among contributing schools. Along these lines, Regional Occupational Programs combine student time in regular high school classes with time spent in unpaid job experiences supervised by a trained vocational teacher. There has been a great deal of research on the effects of vocational education programs. Generally speaking, the indications are that some students find vocational education classes more interesting

than their other classes and are more likely to stay in school because these classes are available. However, vocational education is not perceived as effective in retaining those California high school students most in danger of dropping out (Stern et al. 1985, 46).

Another kind of school and work combination is Work Experience Education, authorized by the California State Board of Education in 1942, which involves students simultaneously in employment and in school classes designed to help them make the most of what they learn in their workplaces (Stern et al. 1985). Under this program, districts may choose from among three types of programs: exploratory (students observe, rather than become engaged in, a variety of occupations), general (on-the-job experiences designed to build positive work attitudes and habits), and vocational (a combination of specific skills training at school with related work experiences off campus in jobs reflecting students' immediate occupational goals).

Work Experience coordinators supervise students (up to a maximum of 125) and are responsible for promoting the program in the community, contacting potential employers and matching them with students, monitoring workplace activities, conducting classes related to the work experience, and counseling students. Students receive at least minimum wages for their work experience.

The Career Link Program in Amador Joint Union High School (Dublin, California) provides a similar opportunity for youth to acquire job-related skills and a nonpaid internship in a career field within the community (California State Department of Education 1985-86). Participating students are provided with nonpaid "hands on" internships in a variety of settings, such as corporations, small businesses, government services, professional practices, and social service agencies. These internships are supplemented with an academic curriculum, which includes career assesment, guidance, and job skills. Through this program, students receive academic credit and letters of recommendation to facilitate the transition from education to work.

The YIEPP demonstration, operating from 1978 to mid-1981, represented an attempt to keep students in high school by providing them with guaranteed subsidized employment as long as they remained in school or pursued a General Equivalency Diploma (GED) through an alternative educational program. YIEPP targeted low-income high school youth 16-19 years old who had not yet completed high school. These students were provided with an opportunity to work part-time during the school year and full-time during the summer, as long as their educational and job performances were satisfactory.

Overall results indicated that although YIEPP did not significantly impact school dropout rates, the program resulted in a small positive enrollment effect. That is, most students continued their education, some who might have dropped out of school remained during the period of the program, and many who had dropped out returned. However, YIEPP was not very successful in retaining former dropouts. This may be due to the

absence of specific remedial courses designed to help students with particular academic problems or low achievement. This corraborates research which indicates that work experience programs alone do not succeed for youth in terms of learning gains and school enrollment (EEE, 28).

A different approach to integrating work with an academic curriculum is the Career Development for Independent Study Program (I.S.) in Santa Clara County, California (California State Department of Education 1985-86). This one-semester course is intended to provide quality curriculum materials in career education using 11 self- contained student packets that deal with areas such as student assessment, values, interest, and aptitudes. Information gained from initial student assessment guides students' exploration of a number of relevant careers. Through the I.S. program, students are familiarized with job-seeking and decision-making skills and career planning.

In-School Delinquency

The Office of Juvenile Justice and Delinquency Prevention of the U.S. Department of Justice sponsors a program called the Alternative Education Program. Begun in 1980, the program's goal is to generate useful suggestions about how to reduce "youth crime and victimization in schools" (Gottfredson 1983, 6). Other goals include reducing suspensions and dropouts and increasing achievement. The underlying philosophy is that students will refrain from delinquency if they identify strongly enough with the institution–in this case, the school.

Characteristics of this program include a smaller student body (created by forming a "school-within-a-school") and close communication between school and youth to demonstrate a school's interest in its students. Attendance is carefully watched, and close communication with parents is emphasized. Students' learning needs are diagnosed and taken into account in educational planning. There are many extracurricular and social activities, all designed to foster student-school identification and pride. Older students are also assigned tutoring responsibilities to younger children (Weis, Janvier, and Hawkins 1981).

On a smaller scale, Pleasant Hill High School (Eugene, Oregon) has been nationally recognized as an excellent high school (Ward 1985). It exemplifies a personalized approach to students which enhances students' pride and identification with their school. Pleasant Hills has a Guide Program which stipulates that every staff member, including the principal, establishes a personal relationship with 14 students. The staff members provide guidance and counseling to their 14 students and visit their homes to strengthen personal bonds. The grouping is done vertically so that a staff member would typically receive four new students each year. An attempt is made to reinforce existing natural relationships by

keeping siblings together. This unusual effort at personalizing what can otherwise be an anonymous high school experience would seem to go a long way towards retaining students in school.

A different program with a similar concept is Atlanta's "Community of Believers" in which the lowest achieving high school youth are identified and paired with a trained volunteer from the business community who provides help and encouragement. Early indications are that the program is making a useful contribution to the students (Mann 1986, 22).

An alternative to traditional student suspension for in-school delinquency in high school is Project Intercept, based in Ossining, New York (California State Department of Education 1985-86). Classroom teachers are offered pre-service and in-service training in dealing with high school students having high rates of school failure and truancy and a pattern of disruptive behavior. Specifically, teachers learn effective classroom management and discipline techniques and effective instructional skills. The three programs developed by Project Intercept are: COPE, Learning Center, and Learning Cluster. In the first two programs, participating students spend two-thirds of their day in self-contained classes and select electives or vocational training for the remaining class periods. The Learning Cluster represents a preventive treatment program for 9th grade high-risk students.

Positive Alternative to Student Suspensions (PASS), based in St. Petersburg, Florida, provides services to teachers, parents, and students in a comprehensive approach to dealing with problem students (California State Department of Education 1985-86).

Family Has Serious Economic Problems

Many students indicate that they leave school in order to work to support their family, either parents or the youth's own family. In a recent national survey of American youth, almost 40 percent of Hispanic males and 24 percent of Hispanic females said they dropped out of school for economic reasons–home responsibilities, financial difficulties, or the prospect of a good job (Rumberger 1983, 201). Economic reasons for dropping out were also given by black and white males and females.

Some students try to juggle both work and school. If student employment involves up to 14 hours a week, there seems to be little effect on tendency to dropout (Mann 1986). If students work between 15-21 hours per week, their likelihood of dropping out increases by 50 percent, with 22 hours or more increasing their chances of dropping out by 100 percent (Mann 1986).

In recognition of these problems, several programs have attempted to combine educational and employment opportunities to help students complete high school. The Departments of Education and Labor sponsored one such effort in 1979 and 1980, by combining the Upward Bound Program (UB) with the Summer Youth Employment Project (SYEP) (Berlin and Duhl 1984, 25). Participating youth worked part-time in jobs with long-term career potential and the remainder of the time in Upward Bound activities and instruction. These students were compared with young people who participated only in regular SYEP programs and another group who were enrolled only in UB. On a comparison of pre- and post-test scores in word knowledge, demonstration students reflected greater gains than SYEP students, although there were no comparable gains in math scores. Gains were similar to those achieved by UB programs. A follow-up eight months later indicated that 91 percent of the demonstration students were in school or employed, compared with 65 percent of SYEP participants (Berlin and Duhl 1984, 26). Results of this demonstration project seem to indicate that it is possible to effectively combine remedial education and work experience.

On a district level, two high schools in San Antonio, Texas offer needy students an opportunity for small-scale employment (*Ed. USA*, July 22, 1985, 348). The students are mainly economically disadvantaged and Hispanic and leave school because they need to earn money. The program pays participating high school students to tutor third graders. In this way, students have an opportunity to earn money, while feeling like they are making a contribution to the education of a younger child.

An unusual attempt to combine the world of work with school is the Las Vegas "storefront school" project, sponsored by Nevada's Job Training Office (Urban School Districts' Task Force on Dropouts 1986). Two classrooms have been set up in local shopping malls to provide an opportunity for students to work in retail shops in the mall until 3 p.m. Afterwards, they go to a classroom in the mall for two hours and receive individualized instruction in required academic subjects. Students received full credit for their classes as well as work experience credit for their jobs.

Other programs which have used work experience and skills training to re-engage students in education and reduce dropout rates include the Experience Based Career Education Programs developed by the National Institute of Education, and the Philadelphia Academies, and Operation Success in New York City (Berlin 1984, 8). These programs teach skills such as jewelry and automotive repair, electronics, and office work; emphasize the achievement of predetermined basic competencies; provide work experience; and include relevant support services (Berlin 1984, 8).

Low Educational or Occupational Aspirations

By the time many young people reach high school, their sense of what is educationally obtainable has in part been determined already. In this sense, attempts to enhance students' educational expectations in secondary school represent a form of remedial effort.

It is in this area of increasing students' educational and occupational aspirations that schools may work in partnership with higher education and business. As an example, Joseph Murphy, Chancellor of the City University of New York (which includes both community and senior colleges) extended to all high school freshmen a promissory note for admission to one of these institutions, to be redeemed after graduation from high school, as a reminder of continuing educational opportunities (Hechinger 1986).

Some communities are entering into cooperative partnerships with local businesses which entail a commitment on the part of the businesses to set aside a particular number of jobs for local students who have successfully completed their high school education.

Teenage Marriage or Pregnancy

Many studies confirm the connection between early marriage and child bearing and dropout behavior (Howell and Frese 1982, Marino 1978, Waite and Moore 1978, Rumberger 1984), and California has the second highest rate of teen pregnancy in the U. S.–14 percent (Assembly Office of Research 1985, 43).

These relationships are much stronger for youth of lower SES backgrounds. Rumberger (1983, 209) indicates that "the probability that a young Black woman from a lower social class background is a high school dropout increases by 40 percentage points if she had a child within 9 months of leaving school." The difference is only four percentage points if she comes from a higher SES background. Black males who father a child are more likely to drop out of high school, but this is not true for other males (Rumberger 1983, 208).

Teen pregnancy rates vary among racial and ethnic groups. According to figures derived from the California Department of Health Services, in 1983 the percentage of pregnancies among young women, ages 15-18 were: black 27.1 percent, Hispanic 15.8 percent, and white 10.7 percent (Assembly Office of Research 1985, 43). Recorded live births among young women in this age group in 1983 totalled 31,106.

The California Department of Health Statistics (1987) estimates the following figures for teenage pregnancy and abortion in California in 1985:

	Ages 13-14	Ages 15-19
Pregnancies	3,588	136,948
Live Births	872	50,365
Abortions	2,311	69,555
Miscarriages	405	17,028
Number of pregnancies per 1,000 females of this age range	9.9	142.7
Number of births per 1,000 females of this age range	2.4	52.5
Number of abortions per 1,000 females of this age range	6.4	72.5

A recent PACE analysis (Cagampang et al. 1987) estimates that there were 157,000 pregnant teens and teenage mothers ages 18 and under living in California in 1985.

According to a study conducted by a business subcommittee of the Education Commission of the States, teenage pregnancy is up 109 percent among whites and 10 percent among nonwhites since 1960, and a million teens become pregnant each year (*San Jose Mercury News*, November 2, 1985).

Problems associated with teen pregnancy are numerous. Young mothers under age 20 face more health problems than older women–emotionally and physically–as a result of their pregnancies. The risk of death and life-threatening maternal complications are greater for these young pregnant women (Assembly Office of Research 1985, 44). Pregnant students under age 18 attempt suicide 10 times more than those students who are not pregnant (Assembly Office of Research 1985, 44). These young mothers also are far more likely to rely upon public assistance for their very survival–two-thirds of the single mothers between the ages of 14 and 25 are living at poverty levels (Assembly Office of Research 1985, 44). Aside from the dangers to young mothers' well-being, teenage pregnancies can involve serious problems for children who often begin their lives with severe environmental handicaps.

California has three programs designed to help pregnant teenagers. Pregnant Minors Programs (Assembly Office of Research 1985, 45) have been in existence the longest and provide for the establishment of special education services for these young women within school districts, but usually away from the regular school site. For example, there is a Pregnant Minors Program at the American Legion Continuation High School in Sacramento (Ward 1985). Young women enroll in this school before the birth of their baby and remain enrolled afterwards, rather than dropping out. There are facilities for infant care. Such facilities are often critical in enabling young mothers to continue their education. In the 1987-88 academic year, approximately 109 local educational agencies and 11 county offices of education contracted with the Pregnant Minors Program, amounting to a total

program funding of approximately $1.7 million (Department of Education, Child Development Division 1987).

The School Age Parent and Infant Development (SAPID) programs provide special classes in parenting skills as well as academic courses and child care so that teenage mothers can obtain their high school diploma. In the 1987-88 academic year, 61 school districts and county offices of education contracted with SAPID, for a total funding of nearly $6.6 million (Department of Education, Child Development Division 1987).

A third program--Adolescent Family Life Program--is sponsored by the Department of Health and designed to intervene in the prenatal care of teenage mothers (Assembly Office of Research 1985, 45). This program establishes regional networks to provide young mothers with academic and vocational skills programs and day care for their newly born infants. The network also provides a case worker to follow each family unit and ensure the provision of primary pregnancy prevention services. An important aspect of the Department of Health Program is generating a data base to measure outcomes of teenage pregnancies. An example of this kind of Adolescent Family Life program is the Teen Age Pregnancy Project in San Francisco which has reduced the dropout rate, increased school enrollment and high school graduation rates, and lowered rates for low birth weight babies and repeat pregnancies (Assembly Office of Research 1985, 48).

One demonstration program designed specifically for pregnant teenagers and poverty-level teenage mothers is Project Redirection (MDRC 1983). Begun in 1980 and recently expanded, the project provides an individualized educational program for each participant. Adult women from the community who function as role models for teens and provide support in the young mother's utilization of program services supplement direct educational services.

One program designated as a noteworthy practice by the California State Department of Education is the Lincoln Senior High School Parenting and Infant Development Program in San Diego, California. A preschool provided for toddlers and their teenage parents sponsors a variety of activities for young children as well as instruction in child development for parents. The preschool is supplemented by a bi-monthly health clinic. In addition to parenting skills, high school students receive instruction in decision-making skills, values clarification, and career education.

In 1985-86, 18,500 pregnant and teenage mothers in California received services in public school education programs ranging from independent study to comprehensive educational programs which included transportation and child care. This left 138,500 or almost 88 percent of these students without service by the public schools (Cagampang et al. 1987). In the 1987-88 academic year, 100 public school districts (10 percent of the total number of school districts) and 11 county offices of education provided educational

services to pregnant teenagers and teenage mothers in California (California Department of Education, Child Development Division 1987).

The available programs fall far short of the need. For teenage mothers, four of the largest barriers to completion of high school are lack of child care facilities, transportation, housing, and limited availability of educational programs. The shortage of programs for pregnant youth and teen parents is primarily a result of limited funds, although there is interest in making more funds available through the California legislature (Assembly Office of Research 1985).

In considering the problems associated with teenage pregnancies, it seems relevant to recall that two positive outcomes attributed to Head Start have been the lower rates of teenage pregnancy and dropout (Berlin 1984, 13). This suggests that early intervention might be an important component of efforts to improve a youth's chances of completing high school.

As teenagers become parents, the educational sequence comes full circle–they are now the teachers and shapers of new lives.

Appendix A
Information Regarding Model Dropout Programs

There is a serious lack of information about dropout prevention programs, both descriptions and evaluations. This makes it very difficult for schools to replicate particular programs.

In recognizing this problem, Gary Wehlage, from the Center for Educational Research, University of Wisconsin, is currently conducting a year-long study to determine the effectiveness of 10 dropout programs across the United States. The criteria being used to measure effectiveness include: reduction in dropout rates, reduction in truancy and discipline problems, increase in credit achievement and progression towards graduation, and increase in reading and writing achievement. In addition to these criteria, Wehlage's group is using the Wisconsin Youth Survey to assess the personal and social orientations of students involved in the programs. Quantitative data will be supplemented by classroom observations and interviews.

A national source of exemplary educational programs, some of which are applicable to dropout prevention, is the annual publication, *Educational Programs That Work*, prepared by the National Diffusion Network Division of the U.S. Department of Education. A program is identified as "exemplary" only after it has been reviewed by the Department of Education's Joint Dissemination Review Panel (established in 1972). To facilitate the replication of successful programs, the National Diffusion Network (NDN), supported by the Department of Education, helps educators acquire materials and assistance they need. For additional information, write: National Diffusion Network Division, U.S. Department of Education, 1200 - 19th Street, NW, Room 714 F, Washington, DC 20036 (202) 653-7006.

For additional information on programs:

- The Oakland County Attendance/Dropout Task Force will soon publish a booklet describing over 100 different programs which are designed to reduce both truancy and dropout rates.

- The Institute for Educational Leadership has published a booklet entitled, "School Dropouts–Everybody's Problem," which includes a section on resources and programs for dropouts. (IEL's address is: 1001 Connecticut Avenue, N.W., Suite 310, Washington, D.C. 20036 (202) 822-8405)

- The High Risk Youth Unit of the California State Department of Education has developd a list of promising programs which may be obtained by writing to: High Risk Youth Unit, State Department of Education, 721 Capitol Mall, 4th Floor, Sacramento, CA 95814 (916) 324-3637

Appendix B
Selected Dropout Prevention Programs

Elementary Level

Early Prevention of School Failure (available in English & Spanish)	Contact: Lucille Werner, Project Director Peotone School District 114 N. Second Street Peotone, IL 60646 (312) 258-3478
Early Success in School K-3	Hugh Cox, Director or Carol Swain, Coordinator 333 G Street P.O. Box 1374 San Rafael, CA 94915 (415) 642-4201
"I Have a Dream"	Linda Blinkenberg Project Coordinator Los Angeles Unified School District 1600 Huntington Drive S. Pasedena, CA 91030 (213) 259-0484
Project Finding Out/Descubrimiento	School District Offices Santa Clara or San Mateo counties, CA
Project Free	Lillian Stillwell Project FREE Alta Vista Elementary School 173 Oak Street Auburn, CA 95603 (916) 885-1927
Project TESA	Victoria Medina TESA Project Director L.A. County Office of Education 9300 E. Imperial Highway Rm. 246 Downey, CA 90242-2890 (213) 922-6167

Secondary

Adolescent Family Life Program

Contact: Thelma Reamer Ellison
714 P. Street, Room 300
Sacramento, CA 95814
(916) 324-2136

Alternative to Suspension Program

Shereene Wilkerson
Willis Jepson Junior High
580 Elder Street
Vacaville, CA 95688
(707) 446-6829

Apollo Program

Stan O'Hara
North High School
300 Galaxy Avenue
Bakersfield, CA 93308
(805) 399-3351

Career Development for Independent Study

Roberta Bender
Santa Clara County
Office of Education
C/VEG Pub.
100 Skyport Drive, MC 236
San Jose, CA 95115
(408) 947-6756

Career Links for High-Risk Youth

Marilyn Moyers
Amador Joint Union
High School District
8151 Village Parkway
Dublin, CA 94568
(415) 829-4958

Diversified Educational Experiences Program (DEEP)

Jane Connett, Director
Project DEEP
Wichita Public Schools
640 N. Emporia
Wichita, KS 67213
(316) 268-7801

Assistance: Joyce Lazzeri
National Diffusion Network
California Facilitator Center
1575 Old Bayshore Highway
Burlingame, CA 94010
(800) 672-3494

Dropout Prevention Program For High Stress, Low Support Secondary School Youth	David Bullis Psychology Department Fort Lewis College Durango, CO 81301
Guide Program	Principal Pleasant Hill High School Eugene, Oregon
Helping Overcome Learner Dropouts (HOLD): 9-12	Joan Rost Pajaro Valley Unified School District 550 Rodrigues Street Watsonville, CA 95076 (408) 728-6330
Operation Success (New York State Department of Education)	Herbert Bienstock, Director Center For Labor & Urban Programs. Research and Analysis Queens College, House 41 Flushing, NY 11367
Parenting and Infant Development Program	Eleanor Jenson Lincoln Senior High School 150 South 49th Street San Deigo, CA 92113 (619) 264-3171 Ext.128
Peninsula Academies	Marilyn Raby Peninsula Academies Sequoia Union High School District 480 James St. Redwood City, CA 95062
Positive Alternatives to Student Suspensions (PASS)	John C. Kackley Supervisor/Consultant or Ralph E. Bailey, Director, Project PASS Pupil Personnel Service Demonstration Project Euclid Center 1015 Tenth Avenue N. St. Petersburg, FL 33705 (813) 823-6696 ext.45

Assistance: Joyce Lazzeri
National Diffusion Network
California Facilitator Center
1575 Old Bayshore Highway
Burlingame, CA 94010
(415) 692-2956
(800) 672-3494

Pregnant Minor Programs

Contact: Robert Cervantes
Director, Child Development
State Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 323-1344

Project Prep

Administration Office
Andrew Hill High School
East Side Union High School District
East San Jose, CA

Project TESA

Victoria Medina
TESA Project Director
L.A. Cty. Office of Education
9300 E. Imperial Highway
Rm. 246
Downey, CA 90242-2890
(213) 922-6167

Senior/Youth Partnership Tutoring Program

Sam Taylor
Senior/Youth Partnership
Tutoring Program
43 N. Green Street
Sonora, CA 95370
(209) 533-5641

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